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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,521	07/03/2003	Jay P. Morreale	9005/10	4776
27774	7590	10/03/2006		
MAYER & WILLIAMS PC 251 NORTH AVENUE WEST 2ND FLOOR WESTFIELD, NJ 07090			EXAMINER BELLO, AGUSTIN	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,521

Applicant(s)

MORREALE ET AL.

Examiner

Agustin Bello

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :7/28/05, 12/17/04, 6/15/04, 12/29/03.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claims 4 and 18 recite the limitation "said tone generator" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Homsey (U.S. Patent No. 6,708,004) in view of Kerfoot (U.S. Patent No. 6,704,511).

Regarding claims 1, 7, and 15, Homsey teaches a test system for monitoring a WDM transmission system that employs at least one optical amplifier, comprising: a test signal generator (reference numeral 12 in Figure 1) generating an optical test signal; an optical coupler (reference numeral 34 in Figure 1) combining the test signal with at least one data signal (reference numeral 32 in Figure 1) located at a given channel wavelength, said optical test signal being located at one or more channel wavelengths distinct from the given channel wavelength

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(column 4 lines 19-34); and an optical performance monitor (reference numeral 20, 22 in Figure 1) receiving at least a portion of the optical test signal. Homsey differs from the claimed invention in that Homsey fails to specifically teach that the optical test signal corresponds to an idler channel wavelength employed to maintain a prescribed operational state of said at least one optical amplifier. However, Kerfoot, in the same field of optical communication, teaches that this concept is well known in the art (column 4 lines 27-36). One skill in the art would have been motivated to place the optical test signal at an idler channel wavelength in order to prevent utilized channels from drawing all of the power from optically pumped fiber amplifier repeaters (column 4 lines 27-36 of Kerfoot). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to place the optical test signal at an idler channel wavelength that maintains a prescribed operational state of said at least one optical amplifier as taught by Kerfoot in the device of Homsey.

Regarding claims 2, 8, and 16, Homsey teaches at least one optical loopback path (reference numeral 42 in Figure 1) associated with said at least one optical amplifier, said at least one optical loopback path optically coupling a first unidirectional optical transmission path to a second unidirectional optical transmission path and wherein said optical performance monitor receives a portion of the optical test signal conveyed over said at least one optical loopback path.

Regarding claims 3, 9, and 17, Homsey teaches that said test signal generator comprises: a tone generator (reference numeral 14 in Figure 1) generating a tone having a pseudo-random sequence (column 2 lines 55-61); and an optical transmitter (reference numeral 16 in Figure 1) coupled to the tone generator and generating an optical test signal based on the pseudo-random tone.

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Regarding claims 4 and 18, Homsey teaches that said optical performance monitor comprises: a delay system (reference numeral 20 in Figure 1) coupled to said tone generator and delaying the optical test signal based on a location of said at least one optical amplifier (column 4 lines 10-13); and a comparator (reference numeral 22 in Figure 1) coupled to said delay system correlating the output of the delay system with the pseudo-random tone generated by the tone generator.

Regarding claims 5 and 19, Homsey teaches that said optical performance monitor includes a signal performance monitor (reference numeral 22 in Figure 1) for selectively monitoring said one or more channel wavelengths of the test signal and said at least one data signal (e.g. the performance monitor selectively monitors at least one wavelength – the wavelength associated with the test signal).

Regarding claims 6, 10, 11, 13, 14, and 20, the combination of Homsey and Kerfoot differs from the claimed invention in that it fails to specifically teach that that the signal performance monitor is a Q-monitor. However, Q-monitors are very well known in the art of optical communication and official notice is given to that effect.

Regarding claim 12, the combination of Homsey and Kerfoot differs from the claimed invention in that it fails to specifically teach the step of monitoring a performance characteristic of said at least one optical data signal. However, monitoring a performance characteristic of an optical data signal is very well known in the art of optical communication and official notice is given to that effect.

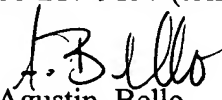
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Agustin Bello
Primary Examiner
Art Unit 2613

AB